ABSTRACT

The invention concerns heuristic algorithms for the classification of Objects. A first learning algorithm comprises a genetic algorithm that is used to abstract a data stream associated with each Object and a pattern recognition algorithm that is used to classify the Objects and measure the fitness of the chromosomes of the genetic algorithm. The learning algorithm is applied to a training data set. The learning algorithm generates a classifying algorithm, which is used to classify or categorize unknown Objects. The invention is useful in the areas of classifying texts and medical samples, predicting the behavior of one financial market based on price changes in others and in monitoring the state of complex process facilities to detect impending failures.